# CHAPTER 5 HEALTHY ADOLESCENTS AND YOUNG ADULTS

Goal: To improve the health and health habits of adolescents and young adults, and, by 1990, to reduce deaths among people ages 15 to 24 by at least 20 percent, to fewer than 93 per 100,000.

Obviously enough, adolescence is a period of complex changes--in physical growth and maturation and in transition from childhood dependency to adult autonomy.

In health, it is--relatively--a good period as measured by the usual morbidity and mortality indicators. Although the death rate for the 40 million young Americans in the 15 to 24 year age group is 2.5 times the rate for children, it is substantially below that for other age groups.

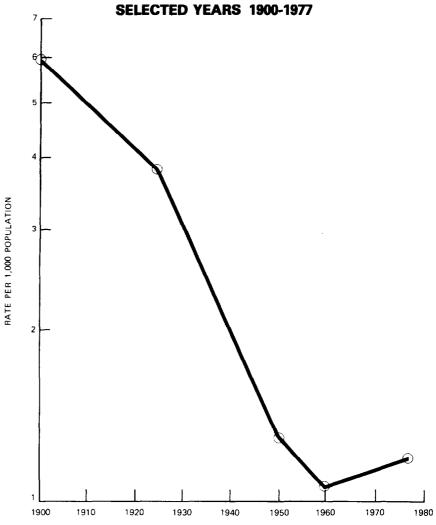
Yet, while health for this age group, as for others, is considerably better than 75 years ago (Figure 5-A), there is one startling difference: for adolescents and young adults, recent progress has not been sustained, as it has been for other age groups.

Americans aged 15 to 24 now have a higher death rate than 20 years ago.

In 1960, the adolescent/young adult mortality rate was 106 deaths per 100,000. By 1970, the rate was up to 128. By 1976, it had dropped to 113--but 1977 statistics show an increase again to 117. This represents nearly 48,000 deaths in 1977 alone. Americans aged 15 to 24 have a higher death rate than their counterparts in other countries such as Sweden, England and Wales, and Japan (Figure 5-B).

FIGURE 5-A

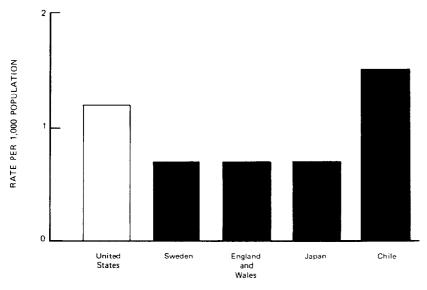
DEATH RATES FOR AGES 15-24 YEARS: UNITED STATES,
SELECTED YEARS 1900-1977



NOTE: 1977 data are provisional, data for all other years are final. Selected years are 1900, 1925, 1950, 1960, 1977.

Source: National Center for Health Statistics, Division of Vital Statistics.

FIGURE 5-B
DEATH RATES FOR AGES 15-24 YEARS:
SELECTED COUNTRIES, 1975



NOTE: The most recent year of data for Chile is 1971.

Sources: United States, National Center for Health Statistics, Division of Vital Statistics; other countries, United Nations.

What are the principal threats to health? Violent death and injury, alcohol and drug abuse, unwanted pregnancies, sexually transmissible diseases are among the more common health-related problems for this age group.

Young men are at particular risk, their death rate being almost three times that of young women. And, although chronic diseases are not among the major causes of death at this period of life (Figure 5-C), the lifestyles and behavior patterns which are shaped during these years may determine later susceptibility to chronic diseases.

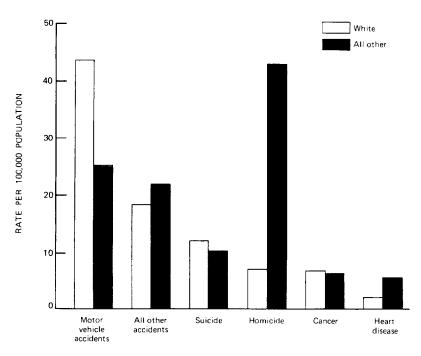
Accidents, homicides, and suicides account for about three-fourths of all deaths in this age group. Responsibility has been attributed to behavior patterns characterized by judgmental errors, aggressiveness, and, in some cases, ambivalence about wanting to live or die. Certainly, greater risktaking occurs in this period of life.

The variability of these traumatic deaths by sex and race is striking. All types are three to four times more frequent for males. While motor vehicle accident deaths are more likely to occur among white youths, young blacks of either sex are at least five times as likely to be murdered; homicide is the leading cause of death for young blacks, ranking slightly ahead of total accidents.

Certainly, injury control must be a clear health promotion priority for young people but the task will not be easy. Injury rates are linked to factors—lifestyle and socioeconomic—not usually addressed by health programs. Nevertheless, a strong effort must be made since this is a major public health problem.

An equally difficult task will be to reduce misuse of alcohol and drugs. But it is essential to strengthen the effort—for the misuse contributes greatly not only to injuries, homicides and suicides but also to other problems of young people which have been growing rapidly.

FIGURE 5-C
MAJOR CAUSES OF DEATH FOR AGES 15-24 YEARS:
UNITED STATES, 1976



Source: Based on data from the National Center for Health Statistics, Division of Vital Statistics.

# Subgoal: Reducing Fatal Motor Vehicle Accidents

In 1977 motor vehicle accidents were the leading cause of mortality in the 15 to 24 year age group, accounting for 37 percent of all deaths.

Although a complex interaction—of driver, vehicle and roadway—determines the risk of accidents, nevertheless a teenage or young adult driver who is involved in a traffic accident is twice as likely to die as a driver 25 years old or older.

Alcohol consumption is clearly implicated in many of the fatalities. About half of fatally injured drivers have been found to have blood alcohol concentrations of more than 100 mg/dl (100 milligrams of alcohol per deciliter of blood). In most states, this is considered presumptive evidence of intoxication. Blood alcohol levels even lower than 100 mg/dl increase the likelihood of an accidentespecially for teenagers, the elderly, and others particularly sensitive to alcohol. Young people also place themselves at greater risk by driving while under the influence of marijuana or other drugs.

The attitudes of young people about risk are significant. While excessive speed was a factor in 35 to 40 percent of all vehicular fatalities in 1977, it was an influence in almost half of those involving teenagers 15 to 19. Although lap and shoulder belts can help to prevent serious injuries and fatalities, 80 percent of Americans, including teenagers and young adults, do not use them.

Motorcycle accidents killed more than 4,000 Americans in 1977--30 percent of them under 20 years of age. Motorcyclists, because they have so little protection, have a seven times greater chance of fatal injury for each mile driven than do automobile drivers. And, more frequently than automobile accidents, motorcycle accidents cause severe, permanent head injuries leading to paralysis.

Although some decline in vehicular accidents resulted from institution of the 55 miles an hour speed limit, more can be done. Greater production and use of active and passive passenger restraints, safer cars, and increased use of helmets by motorcyclists, as well as continued enforcement of speed limits, would lead to further reductions, and these actions are discussed in Chapter 9.

## Subgoal: Reducing Alcohol and Drug Misuse

Alcohol and drug abuse are behaviors with major implications in many areas. Not only do they increase risk of accidents, suicides, and homicides, they also contribute to family disruption and poor school and job performance; and they have a potential for leading to long-term chronic disease.

Use of alcohol and drugs has been increasing among young people. About 80 percent of 12 to 17 year olds report having had a drink, more than half drink at least once a month, nearly three percent drink daily. Since 1966, the number of high school students intoxicated at least once a month has more than doubled, from 10 to over 20 percent. Nearly 80 percent of male high school seniors drink at least once a month and more than six percent drink daily.

Although young people may drink less regularly than older people, they tend to consume larger quantities and are more likely to become intoxicated on drinking occasions. No wonder, then, that alcohol-related accidents are the leading cause of death in the 15 to 24 age group and 60 percent of all alcohol-related highway traffic fatalities are among young people.

Drug abuse was virtually unknown among young people in 1950. Prior to 1962, lifetime experience with any illicit drug was limited to less than two percent of the population, including young people.

By 1977, 60 percent of 18 to 25 year olds had tried marijuana; about 20 percent had tried stronger

substances such as cocaine and hallucinogens; and about 30 percent had illegally used drugs available only on medical prescription. Even among 12 to 17 year olds, nearly 30 percent had tried marijuana.

Beyond increasing drug experimentation among young people, the frequency of use is increasing. Less than one percent of high school students report daily use of drugs other than alcohol, tobacco or marijuana-but over 20 percent regularly smoke cigarettes and about 10 percent smoke marijuana every day. And stimulants--amphetamines--are another category of drugs which young people report taking most frequently.

The physical and psychological effects are highly variable. They differ from person to person as well as from drug to drug. It is, therefore difficult to determine precisely how harmful experimentation is in terms of the drug use to which it leads.

By any measure, however, drug problems are serious, have increased greatly—and if the full potential of our adolescents and young adults is to be realized, additional steps (Chapter 10) must be taken to reduce the harmful effects from both alcohol and drugs.

## Other Important Problems

Among other prominent threats to the physical and mental health of young people are problems of adolescent pregnancy, sexually transmissible diseases, mental illness, suicide and homicide. To a great extent, they represent failures to help young people acquire the skills and information needed to solve problems and make sound decisions during years of rapid change.

## Teenage Pregnancy

Childbearing during adolescence is a high risk experience for mother and child alike.

Yet one-fourth of American teenage girls have had at least one pregnancy by age 19. Every year

about one million adolescents under the age of 19 become pregnant, including perhaps 300,000 under 15--which represents an annual rate of 10 percent of all teenage girls. Two-thirds of them are unmarried. At least three of every 10 elect to terminate their pregnancies. Birth rates for teenagers aged 16 to 19 are declining but they are increasing for girls under 16.

These young mothers have greater risk of bearing low birth weight infants--with consequent developmental problems and risk of infant death associated with low birth weight, as noted in Chapter 3. And often they face significant social problems: disruption of schooling, high rates of repeat pregnancy, and public dependency.

A substantial proportion of school districts still encourage expectant teenage mothers to drop out of school; many do not provide for continuing education; more than 25 percent of the young mothers become pregnant again within just a year after their first delivery.

A major underlying problem that urgently needs addressing for this age group is the inadequate knowledge of, and access to, information on sexual behavior and family planning services. In 1976, an estimated 40 percent of unmarried teenage girls, aged 15 to 19 (two-thirds by age 19), had engaged in sexual intercourse and 25 percent of them never used any form of contraception.

Birth control methods currently prevent an estimated 750,000 unwanted pregnancies annually. If all sexually active young people who did not want to become pregnant were to use some effective form of contraception regularly, it is estimated that premarital pregnancies would drop by more than 300,000 a year.

There is growing evidence, too, that for the pregnant teenager and her baby, comprehensive programs, which include emphasis on the mother's continued schooling, are associated with fewer

repeat pregnancies. Many programs have been developed which demonstrate the value of education for parenthood and family planning--and of improved family support for teenage parents.

An example of what a medical center-based program for teen mothers and their infants can accomplish is provided by a program at the Johns Hopkins Medical Institutions in Baltimore.

There, staff members provide young mothers with comprehensive medical and psychological services, conduct classes from the first prenatal visit through labor, delivery, and for three years after delivery, and, perhaps most important, form close supportive relationships with the young women.

Recent results indicate that 85 percent of mothers enrolled at the center have returned to school and only five percent became pregnant again within a year after delivery. Of all Baltimore teen mothers, only 10 percent return to school and 47 percent become pregnant again within a year. Teen mothers in the program also have had fewer obstetrical complications and fewer premature deliveries, and have given birth to larger and healthier babies than Baltimore's teen mothers in general.

# Sexually Transmissible Diseases

Sexually transmissible diseases increasingly threaten the health and well-being of millions of adolescents and young adults.

Although there has been some recent improvement, overall, in the incidence of gonorrhea and syphilis, both diseases continue to increase among adolescents.

Moreover, other sexually transmissible diseases—such as herpes virus and nonspecific urethritis—have recently become recognized as major public health problems. Along with gonorrhea and syphilis, they account for an estimated eight to 12 million cases of sexually transmitted diseases a year.

And the greatest risk of acquiring them occurs among young people age 15 to 24 who account for about 75 percent of all cases.

Because infection is often unrecognized for lack of apparent symptoms, many young people also suffer serious permanent complications. Each year, an estimated 75,000 women of childbearing age become sterile as a result of pelvic inflammatory disease caused by a sexually transmitted infection. Actions to control sexually transmissible diseases are discussed in Chapter 8.

#### Mental Health

That adolescents today are coming of age in a predominantly urban, technological society, characterized in part by shifting values and traditions, may account in no small part for alcohol and drug abuse problems and others.

Since individual development does not take place in a vacuum but is strongly influenced by sociocultural factors, society's expectations play a large part in the way young people experience this period of their lives. But the turbulence of the last decade has made it difficult for young people to develop any clear sense of what these expectations are.

Some observers point to teenage pregnancy, delinquency and crime, suicides, and child abuse as well as drug and alcohol abuse as both evidence and products of that uncertainty. Others contend that these problems are simply more visible today and involve only a minority of adolescents.

In any event, the transition from childhood to adulthood may take some toll on an adolescent's emotional stability. And problems such as 20 percent unemployment among teenagers (40 percent for minority youth) create additional stress for young people trying to develop their identity and their place in life.

While the full degree of impact of broad social issues and overall social and national stability on personal development is not clear, there is general agreement that the family has the most direct influence on the expectations of young people. Yet family structures have been undergoing significant changes in recent years.

Added complexity is faced by the teenage parent, often single, trying to fulfill the personal growth needs of an adolescent while simultaneously having to meet the needs of a dependent, rapidly developing baby. Because of the demands of these responsibilities, support through special programs for teenage parents, including some form of day care and other community and mental health services, is very much needed.

The diverse problems of teenagers and young adults require a broad range of mental health services and the combined efforts of the family, school, workplace, and community. The pressures of parents and peers, as well as of the media, are all factors which contribute to these problems—and which can be employed to help solve them.

The growth of community mental health services in recent decades has made resources more available in local areas and adolescents are gradually beginning to use them. But mental health programs tailored to adolescents are not abundantly available. The recent report of the President's Commission on Mental Health recommends expansion of these programs.

#### Suicide

Suicide is the third leading cause of death among teenagers and young adults, some 5,600 of whom took their own lives in 1977. Of total suicides, 20 percent are committed by people under age 25.

Among adults, three times as many men as women commit suicide and adolescent males are more likely to take their own lives than adolescent females.

The most frequent weapons include firearms, drugs, and motor vehicle exhaust gases. Firearms are used four times as often as poisoning (the second most frequent method), and firearm suicides have been increasing at a much faster rate than suicides by other means.

Unfortunately the suicide rate among young people has not plateaued, but is increasing. In 1950, the rate was only about 20 percent of what it reached in 1977. In 1976, more than one of every 10 teenagers and young adults who died committed suicide. Many more suicides were attempted but not reported as such or not identified as suicidal efforts.

It is estimated that some five million Americans have made one or more unsuccessful attempts at suicide and that 10 percent of this group will ultimately succeed. Some estimates indicate that the actual suicide rate is three times the reported rate.

An increased suicide rate is not unique to this country. Many other industrialized nations are experiencing increases, particularly among young people. Indeed, in 1974 several countries exceeded the United States suicide rate of about 12 deaths per 100,000. Japan had 18, Sweden 20, and Germany 21.

Most suicidal persons give verbal or behavioral warnings first, and 80 percent of those who take their own lives have made previous attempts. While predicting suicide with certainty is impossible, those at highest risk include people who are severely depressed and those at odds with themselves and the people close to them. Mental health workers are becoming more skillful in early detection and management of suicidal tendencies. A prime need is for hotlines—and prompt referral to sources of professional help when problems are noted (see Chapter 10).

## Homicide

Murder accounts for over 10 percent of all deaths among adolescents and young adults--just

under seven percent for whites but almost 30 percent for blacks in this age group.

In 1977, when an estimated 21,000 Americans were victims of homicide, about 25 percent were aged 15 to 24, placing that group at greater risk than the rest of the population. The deaths of these young people represent a very large and tragic waste in terms of the many years of productive life lost with each death.

The American homicide rate is very much greater than for most other industrialized nations. Our rate of 10.2 homicides per 100,000 people in 1974 compares with a rate of only 0.9 for France, 1.0 for Great Britain, 1.1 for Sweden, and 1.3 for Japan.

In about 20 percent of murders in this country, victim and offender are relatives or have a close relationship; in 40 percent, they are acquaintances; and in the remaining 40 percent, there is no known relationship. An estimated 60 to 80 percent of homicides occur as the result of personal disagreements and conflict, while robbery, sexual assault and other circumstances account for the rest.

As with other fatal injuries, homicide is more common among the poor, more frequent on weekends and at night, and often associated with alcohol abuse. In about 90 percent of murders, both offender and victim are of the same race. Men are three to four times more likely to be victims—and five times as likely to be offenders—as women.

Many factors undoubtedly are involved in our high homicide rate. Economic deprivation, family breakup, the glamorizing of violence in the media, and the availability of handguns all are important. Firearms, the most frequently used homicide weapon in the United States, were involved in 63 percent of the murders occurring in 1977, with handguns used in half, and cutting or stabbing weapons employed in 18 percent.

Easy access to firearms appears to be the one factor with a striking relationship to murder. From

1960 to 1974, handgun sales quadrupled to more than six million a year. During that same period, the homicide rate increased from 4.7 per 100,000 to 10.2 for the overall population—and from 5.9 to 14.2 for young people aged 15 to 24.

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Broad physical, psychological, social, and family changes all have a powerful impact on young people.

Young people are compelled to adjust not only to rapid individual changes, but simultaneously to meet the expectations of both family and community. The strains which result can have considerable bearing on the problems of adolescents and young adults.

Stress is to be expected in life. But for some adolescents and young adults, it can become overwhelming.

At critical junctures, they urgently need assistance in finding ways to cope and make important decisions and constructive adjustments. Such assistance (described in Chapter 10) can contribute greatly to improving both their health and the quality and value of their lives.